

Scenario 2A

LOTT	Other WWTP	Rivers	External	DES
Use LOTT's current effluent limits (3 mg/L DIN per day April, through October).	Increase DIN by 60% year round.	Reduce <i>human sources</i> of DIN by 35% year round.	Reduce <i>human sources</i> of DIN by 35% year round.	Natural conditions.
All other months - use 1997 data inputs.	Split DIN reductions between NH <sub>4</sub> and NO <sub>2</sub> /NO <sub>3</sub> proportional to their contribution towards total DIN load.			**Difference between scenario and standard becomes allocation. Calculator estimates 99% reduction.
<u>Notes:</u> <ul style="list-style-type: none"><li>• Use model derived scalars.</li><li>• Represents <b>minimum reductions</b> to nonpoint, external and WWTPs.</li><li>• LOTT is at current effluent limits when applicable (this is an increase from 1997 data and "existing" conditions).</li><li>• Other WWTPs receive a 60% percent increase, which puts them closer to 2016 DMR data (based on Boston Harbor DMRs).</li></ul>				

Scenario 2B

LOTT	Other WWTP	Rivers	External	DES
150 lb. DIN per day during August and September.	Kept at existing (1997 levels).	Reduce <i>human sources</i> of DIN by 70% year round.	Reduce <i>human sources</i> of DIN by 70% year round.	Natural conditions.
All other months - use 1997 data inputs.	Split DIN reductions between NH <sub>4</sub> and NO <sub>2</sub> /NO <sub>3</sub> proportional to their contribution towards total DIN load.			**Difference between scenario and standard becomes allocation. Calculator estimates 85% reduction.

Notes:

- Use model derived scalars.
- Represents **maximum reductions** to nonpoint, external and WWTPs.
- LOTT is reduced to be closer to 2016 DMR data for (August and September).
- Other WWTPs remain the same (1997 inputs) which is above 2016 discharges.

*Scenario 2C*

LOTT	Other WWTP	Rivers	External	DES
200 lb. DIN per day during August and September.	Increase DIN by 60% year round.	Reduce <i>human sources</i> of DIN by 50% year round.	Reduce <i>human sources of</i> DIN by 40% year round.	Natural conditions.
All other months - use 1997 data inputs.	Split DIN reductions between NH <sub>4</sub> and NO <sub>2</sub> /NO <sub>3</sub> proportional to their contribution towards total DIN load.			**Difference between scenario and standard becomes allocation. Calculator estimates 95% reduction.
<u>Notes:</u> <ul style="list-style-type: none"><li>• Use model derived scalars.</li><li>• Represents <b>mid level reductions</b> to nonpoint, external and WWTPs. Reduces nonpoint by larger amount because it contributes larger proportion.</li><li>• LOTT is above current discharge level but under effluent limit for August and September.</li><li>• Other WWTPs receive a 60% percent increase, which puts them closer to 2016 DMR data (based on Boston Harbor DMRs).</li></ul>				

*Scenario 2D*

LOTT	Other WWTP	Rivers	External	DES
150 lb. DIN per day during August and September.	Kept at existing (1997 levels).	Reduce human sources of DIN by 30% year round.	Reduce human sources of DIN by 50% year round.	Natural conditions
All other months - use 1997 data inputs.	Split DIN reductions between NH <sub>4</sub> and NO <sub>2</sub> /NO <sub>3</sub> proportional to their contribution towards total DIN load.			**Difference between scenario and standard becomes allocation. Calculator estimates 98% reduction.
<u>Notes:</u> <ul style="list-style-type: none"><li>• Use model derived scalars.</li><li>• Scenario reduces waste water treatment plants and gives minimal reductions to nonpoint.</li><li>• LOTT is reduced to be closer to 2016 DMR data for (August and September).</li><li>• Other WWTPs receive a 60% percent increase, which puts them closer to 2016 DMR data (based on Boston Harbor DMRs).</li></ul>				

Scenario 2E

LOTT	Other WWTP	Rivers	External	DES
200 lb. DIN per day during August and September.	Increase DIN by 60% year round.	Reduce <i>human sources</i> of DIN by 45% year round.	Reduce <i>human sources</i> of DIN by 45% year round.	Natural conditions.
All other months - use 1997 data inputs.	Split DIN reductions between NH <sub>4</sub> and NO <sub>2</sub> /NO <sub>3</sub> proportional to their contribution towards total DIN load.			**Difference between scenario and standard becomes allocation. Calculator estimates 98% reduction.

Notes:

- Use model derived scalars.
- Represents **mid level reductions** to nonpoint, external and WWTPs. Splits nonpoint and external evenly.
- LOTT is above current discharge level but under effluent limit for August and September.
- Other WWTPs receive a 60% percent increase, which puts them closer to 2016 DMR data (based on Boston Harbor DMRs).

Scenario 2F

LOTT	Other WWTP	Rivers	External	DES
150 lb. DIN per day during August and September.	Increase DIN by 60% year round.	Reduce <i>human sources</i> of DIN by 50% year round.	Reduce <i>human sources</i> of DIN by 50% year round.	Natural conditions.
All other months - use 1997 data inputs.	Split DIN reductions between NH <sub>4</sub> and NO <sub>2</sub> /NO <sub>3</sub> proportional to their contribution towards total DIN load.			**Difference between scenario and standard becomes allocation. Calculator estimates 98% reduction.

Notes:

- Use model derived scalars.
- This is between 2B and 2C. Back up option if 2C does not meet standards, less aggressive on nonpoint and external than 2B.
- All WWTPs capped at current (2016) discharge levels.